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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,058	02/02/2001	Sarah M. Brandenberger	10002214-1	9353

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EXAMINER

SELBY, GEVELL V

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 04/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/776,058	<b>Applicant(s)</b> BRANDENBERGER ET AL.9	
	<b>Examiner</b> Gevell Selby	<b>Art Unit</b> 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see the amendment, filed 3/22/05, with respect to the rejection(s) of claim(s) 2 and 8-14 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Adair, US 5,812,188.

2. Applicant's arguments filed 3/22/05 have been fully considered but they are not persuasive in regard to claim 1, 3-7, and 15-20. The applicant's submit the prior art does not disclose the following limitations of the claimed invention:

1) "an image sensor sensing multi-color pixel data corresponding to said optical image" as claimed in claim 1;

2) "recording an image on an electronic media of said digital visual recording device which includes said combined filtering effects" as claimed in claim 15. The Examiner respectfully disagrees.

#### **Examiner's Reply:**

In regard to claim 1, the specification states that "each point of the photographed image is captured on three pixels, a green sensitive pixel, a blue sensitive pixel and a red sensitive pixel" in referring the multicolor pixel data. The image sensor in the Cooper reference senses multi-color pixel data corresponding to the optical image because it has green blue and red sensitive pixels that receive the light of the specific color and generates electrical charge corresponding to the light received by each cell (see column 4, lines 66). It is noted that the reference to the true color in the Cooper reference refers to displaying the combined RGB signal from the output

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processor without the color filtering effects (see column 3, lines 63-67 and column 5, lines 39-44 and 56-58). The image sensor of the Cooper reference may capture the multi-color pixel data to said optical image sequentially, but that is irrelevant to the claim because simultaneous image capture of the multicolor image data is not claimed.

In regard to claim 15, The Cooper reference discloses the filter section switches permit a unique combination of red green and blue gains to be applied to the corresponding signal components from the image sensor (72) during the operation of video processor (48) (see column 6, lines 2-6). The signals with the combined filter effects are sent from the video processor (48) to the A/D converter (5) and then are stored in the DRAMs (54, 56, and 58) or recording medium (see figure 2, column 3, lines 56-63 and column 5, lines 4-6).

Claims 2-7, 9-14, and 16-20 are not allowable due to their dependency on claims 1, 8 and 15.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1, 5, 7, 15-17, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Cooper et al. US 4,742,388.**

In regard to claim 1, Cooper et al. US 4,742,388, discloses a digital camera (see figure 2) comprising:

an optical lens system providing an optical image, an image sensor sensing multi-color pixel data corresponding to said optical image (see figure 2, element 72 and column (see column 3, lines 30-34);

an input device (see figure 1, element 16) configured to respond to a manual input selecting one of a plurality of image filters (see column 3, lines 42-47); and

a processor (see figure 2, element 48) configured to process said pixel data in response to said selected image filter to provide filtered image data (see column 5, line 63 to column 6, line 14).

In regard to claim 5, Cooper et al. US 4,742,388, discloses the digital camera of claim 1, wherein the input device includes menu options or a list of options (see figure 1, element 16).

In regard to claim 7, Cooper et al. US 4,742,388, discloses the digital camera of claim 1 wherein a subset of said plurality of image filters are selectable by said input device and said processor is configured to provide a composite filter effect in response to selected ones of said subset (see column 5, line 65 to column 6, line 14).

In regard to claim 15, Cooper et al, US 4,742,388, discloses a method of combining filter effects into digital photography, said method comprising:

selecting a first filter (red) on a digital recording device (see column 6, lines 10-21);

selecting a second filter (green or blue) on a digital recording device (see column 6, lines 10-21);

combining said first filter and said second filter to create a combined filtering effect (orange tint: see column 6, lines 10-21);

adjusting properties of said digital recording device to include combined filtering effects (see column 6, lines 10-21: Setting F2 to the incandescent light filter is adjusts the properties.); and

outputting an image on an electronic media of said digital visual recording device which includes said combined filtering effects (see column 3, lines 63-67);

recording an image on an electronic media (see figure 2, element 54, 55, and 56) of said digital visual recording device which includes said combined filtering effects (see column 4, line 60 to column 5, line 10).

In regard to claim 16, Cooper et al, US 4,742,388, discloses the method of claim 15. The Cooper reference discloses selecting is accomplished through a hierarchical menu, available before said image recording (see figure 1, element 16 and column 5, line 56 to column 6, line 21).

In regard to claim 17, Cooper et al, US 4,742,388, discloses the method of claim 15 wherein adjusting properties of said digital recording device includes providing a preview of said image which includes the filter effects (see column 3, lines 55-59 and figure 1, element 14: The images from the processor are continuously displayed on the on the monitor for viewing before or after filtering changes).

In regard to claim 19, Cooper et al, US 4,742,388, discloses the method of claim 15 wherein said filter effects include one of effects filters, technical filters, and correction filter (see column 6, lines 2-14).

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In regard to claim 20, Cooper et al, US 4,742,388, discloses the method of claim 15 wherein said effect filters include variations in color intensity (column 6, lines 4-10).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 2 and 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper et al, US 4,742,388 in view of Adair, US 5,812,188.**

In regard to claim 2, Cooper et al. US 4,742,388, discloses the digital camera of claim 1 further comprising: a display configured to provide a visual display of said filtered image data (see figure 1, element 14); but lacks wherein the input device is a touch sensitive overlay provided on said display.

Adair, US 5,812,188, discloses a digital camera with a touch screen display use to control the image of the monitor (see column 6, lines 22-27). The Adair reference teaches that either touch screen controls or a plurality of switches can be used as an input device (see column 3, lines 58-65). It would have been and obvious to one of ordinary skill in the art at the time of invention to have been motivated to replace the switches of the Cooper reference with the touch screen of the Adair reference in order to control the image on the monitor screen by simply touching the screen at the appropriate location as

taught by Adair as well as make it easier for the user to keep their eyes on the screen while operating the apparatus.

In regard to claim 8, Cooper et al. US 4,742,388, discloses an apparatus for recording digital images (figure 1) comprising:

a menu (see figure 1, element 16) displaying a selection of a filter effect available on a color video endoscope system (see column 3, lines 46-47);

a processor (see figure 2, element 48) configured to perform an adjustment of the properties of said digital visual recording device to include selected ones of said filter effects (see column 5, lines 63 to column 6, lines 14); and

an output providing an electronic representation of said filtered image (see column 3, lines 18-20 and figure 1, element 14 or figure 2, element 54-56).

The Cooper reference does not disclose a graphic user interface menu.

Adair, US 5,812,188, discloses an endoscope monitor with a touch screen graphical user interface menu (56) that controls the image on the monitor (see column 6, lines 22-26).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Cooper et al. US 4,742,388, in view of Adair, US 5,812,188, to have a graphical user interface menu, in order to control the image on the monitor screen by simply touching the screen at the appropriate location as taught by Adair as well as make it easier for the user to keep their eyes on the screen while operating the apparatus.



In regard to claim 9, Cooper et al. US 4,742,388, in view of Adair, US 5,812,188, discloses the digital camera of claim 8. The Cooper reference discloses wherein said menu is configured to provide a hierarchical display of sad filter effects (see figure 1, elements F0/F1/F2/F3).

In regard to claim 10, Cooper et al. US 4,742,388, in view of Adair, US 5,812,188, discloses the apparatus of claim 8. The Cooper reference discloses wherein said processor is configured to provide a preview of a filtered image (see figure 1, element 14 and column 3, lines 55-59).

In regard to claim 11, Cooper et al. US 4,742,388, in view of Adair, US 5,812,188, discloses the apparatus of claim 8. The Cooper and Adair references lack wherein said output includes a removable data storage media capturing said electronic representation.

It is old and well known in the art that removable data storage media are used to store image data. Official Notice is taken that it would have been obvious to one skilled in the art at the time of invention to modify the Cooper reference to have a removable storage media to store the output image in order to be able to interchange storage media as well as transfer the image to other devices.

In regard to claim 12, Cooper et al. US 4,742,388, in view of Adair, US 5,812,188, discloses the apparatus of claim 8 wherein said filter effects include one of effects filters, technical filters and correction filters (see column 6, lines 2-14).

In regard to claim 13, Cooper et al. US 4,742,388, in view of Adair, US 5,812,188, discloses the apparatus of claim 8. The Cooper reference discloses wherein

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said filter effects include variations in color intensity (see column 5, line 45 to column 6, line 10).

In regard to claim 14, Cooper et al. US 4,742,388, in view of Adair, US 5,812,188, discloses the apparatus of claim 9. The Cooper reference discloses the processor selectively inhibits said filter effect in response to said input (see column 5, lines 56-61).

**7. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper et al, US 4,742,388 in view of Shiomi, US 6,650,361.**

In regard to claim 3, Cooper et al. US 4,742,388, discloses the digital camera of claim 1 but does not disclose the camera comprises:

an image storage configured to implement lossy compression of said filtered image data to provide compressed image data, and store said compressed image data.

Shiomi, US 6,650,361, discloses a digital camera that uses lossy compression as a compression method and then stores the image in a memory (see column 11, lines 56-58). If lossy compression is done using Discrete Cosine transform to transform and quantize image data in the respective blocks into two-dimensional frequency data, the image data volume can be greatly reduced (column 11, lines 59-65).

It would have been obvious to a person of ordinary skill in the art to have been motivated to modify Cooper et al, US 4,742,388 in view of Shiomi, US 6,650,361, to use lossy compression and store the compress data in memory in order to reduce the image data volume to be stored as taught by Shiomi.

In regard to claim 4, Cooper et al. US 4,742,388, discloses the digital camera of claim 1 wherein the image sensor is a color solid state image sensor but does not specify that it is a Charged Coupled Device array (CCD). It is well known in the art to use CCD image sensor as the image sensor disclosed in the Shiomi reference (see column 2, lines 33-37). It would have been an obvious design decision for one of ordinary skill in the art to have been motivated to modify Cooper et al, US 4,742,388 in view of Shiomi, US 6,650,361, to have an CCD image sensor in order to capture the object image having desired resolutions as taught by Shiomi (see column 2, lines 33-37).

- 8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper et al, US 4,742,388 in view of Safai et al., US 6,167,469.**

In regard to claim 6, Cooper et al. US 4,742,388, discloses the digital camera of claim 1 but lacks a voice processor configured to respond to voice commands.

Safai et al., US 6,167,469, discloses a digital camera including a microphone and CPU that can receive voice command and voice messages (see column 6, lines 19-27).

It would have been obvious to a person skilled in the art to have been motivated to modify Cooper et al, US 4,742,388 in view of Safai et al., US 6,167,469, to have a voice processor to receive commands from the user either way as taught by Safai.

- 9. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper et al., US 4,742,388.**

In regard to claim 18, Cooper et al, US 4,742,388, discloses the method of claim 15. The Cooper reference lacks wherein said output includes a removable data storage media capturing said electronic representation.

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It is old and well known in the art that removable data storage media are used to store image data. Official Notice is taken that it would have been obvious to one skilled in the art at the time of invention to modify the Cooper reference to have a removable storage media to store the output image in order to be able to interchange storage media as well as transfer the image to other devices.

*Conclusion*

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gevell Selby whose telephone number is 571-272-7369. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on 571-272-7950. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gvs

  
TUAN HO  
PRIMARY EXAMINER